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AUTHOR Ladewig, Howard
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ABSTRACT

Starting from the premise that administrators, program personnel, and social scientists are equally responsible for the conduct of evaluation, this paper addresses the legitimate role of evaluation research via discussion of: (1) the environment in which evaluation takes place; (2) types of evaluation designs; and (3) selection of an evaluation design for social action programs in rural development. Discussion of evaluation environment centers on the risks involved in evaluation research due to the current chasm between the administrator's desires and the researcher's requirements re: evaluation design. Types of evaluation presented are: (1) Field Experiment (determines the validity of a particular approach as a means of achieving a desired change or objective and/or instituting a workable program); (2) Systems Models (emphasis on increasing program effectiveness, rather than on success or failure); (3) Systems Output (Program impact, program strategy, project, and project rating evaluations); (4) Systems Input (context, input, process, and product evaluations). Selection of a ligitimate rural development evaluation design is described as necessitating formulation of: specific goals; precise activities which match the goals; and standards against which the program can be compared, paying particular attention to meshing the needs and requirements of administrators and evaluators. (JC)

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THE CONCEPT AND PHILOSOPHY OF EVALUATION IN RURAL DEVELOPMENT*

by

Howard Ladewig

Department of Sociology and Anthropology

North Carolina State University

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THE CONCEPT AND PHILOSOPHY OF EVALUATION IN RURAL DEVELOPMENT

Evaluation research is becoming increasingly important to a large number of people for a variety of reasons. Administrators confronted with increasing competition for funding are looking to evaluative research to determine program effectiveness. Many sociologists and other social scientists concerned about the failure of governmental policy-making to be informed by the information and knowledge generated in their disciplines regard evaluative research as an avenue for social science input into governmental policy-making. Legislators striving for more efficient utilization of limited resources are initiating legislation which require evaluative research for assessment of whether federal policies and programs are meeting the needs of society.

Although Congress has passed legislation that has included both the requirements for evaluation and the funding for carrying it out, the federal government as a whole and most agencies have no overall system for effectively evaluating program and project effectiveness (Wholey et al., 1973). Instead, most evaluations have been guided by definitions of evaluation which have either equated it with measurement and testing, fulfilling of objectives, or professional judgements (Alkin, 1969).

In spite of the increased presence of evaluation research, much disagreement exists between and among administrators, program personnel, and social scientists concerning the appropriate and legitimate role of evaluation in social action programs. In fact, serious questions exist pertaining to the capacity of evaluation research to provide sufficiently sound information.

Mann (1972), for example, suggests that the quality of evaluative research is remarkably poor and that there is little difference in the results of evaluative studies conducted in different content areas. After comparing nearly 200 evaluation studies of similar design he concluded, "Specifically, there is no indication that the findings of evaluative research are influenced by the method tested, the content area in which the test is conducted, the change criteria used or the methodological quality of the study of which the evaluation is made."

There is a growing persuasion--particularly in the field of education--that much of the difficulty encountered in evaluation research stems from the use of experimental design to evaluate ongoing programs or operational systems. Suchman (1972) argues that action and service programs are ongoing events which cannot be separated from the entire operation process, therefore, an evaluation design must be utilized which provides input to the total programming process rather than confinement to the terminal effects of a program. Operations research constitutes such a design.

Starting from the premise that administrators, program personnel, and social scientists are equally responsible for the conduct of evaluation, this paper will address several issues--some major, others merely nuance--that affect the appropriate and legitimate role of evaluation research. The issues include the environment in which evaluation takes place, types of evaluation design, and selection of an evaluation design for social action programs in rural development.

Environment for Evaluation

Guba (1969) suggests that any professional area that is so much avoided; that produces so many anxieties; that immobilizes the very people who want to avail themselves of it; that is incapable of operational definition, even by its most trained advocates (who in fact render bad advice to the practitioners who consult them); which is not effective in answering reasonable and important questions; and which has made little apparent effort to isolate and ameliorate its most serious problems--must indeed give us pause.

At present, a wide chasm exists between the desires of administrators and the requirements of researchers over the development of an evaluation design. Because of this chasm participation in evaluation research often has proven harmful to those involved in its undertaking.

For example, programs have been developed all too often which did not have clearly specified goals but did have unrealistically high expectations. The setting of such goals is a matter of policy, but when the policy makers do not specify goals clearly and still require evaluation, the evaluators are put in the uncomfortable position of deciding what were the goals policy makers had in mind. Thus, when high expectations are not realized, negative findings are not easily accepted (Rossi, 1972).

Dissatisfaction with evaluation findings may result in evaluation practices being attacked on methodological grounds for political and bureaucratic purposes. The researcher becomes the center of controversy and the debate transfers from ideology to methodology (Williams, 1972).

On the other hand, administrators are keenly aware of poor or inappropriate evaluation designs. Often the aims and character of programs are misconceived by the evaluator and as a result evaluation design and execution are of limited value (Cohen, 1970). Also, ample evidence exists of evaluations that have focused rather heavily on testing of hypotheses of interest primarily to the evaluator and of little interest or value to the decision-maker (Guttentag, 1973).

Under existing conditions it is difficult to blame program personnel for avoiding evaluation when the basic relationship between evaluator and practitioner is one of the former judging the work of the latter. This judgement often constitutes a threat to those responsible for program activities reaching stated objectives.

Correspondingly, social scientists cannot be faulted for their reluctance to conduct evaluation when they must contend with conceptual and methodological problems; problems of relationship, status, and function; practical problems; an and problems of career and reward. Added to that, evaluation is becoming increasingly political (Weiss, 1972).

Types of Evaluation

Much of the difficulty encountered by evaluation originates in the use of an evaluation design that is not appropriate to the type of program being evaluated. Evaluation can occur on several levels and use different research designs which vary in their approximation to the ideal scientific experiment (Suchman, 1972).

Within the broad category of research the distinguising characteristics of evaluation research is that the measurement of outcomes takes place either under actual operating conditions or under conditions that reflect in some reasonable degree the problems associated with operating actual programs (Williams, 1971). Within this broad category of evaluation research two types of evaluation may be distinguished: those based on experimental design and those based on evaluation of the total system.

The purpose of field experiment evaluation is to determine (1) the validity of a particular approach as a means toward the achievement of some desired change or objective, and (2) the ability to institute a workable program based on that approach (Suchman, 1972). Systems models place emphasis on increasing program effectiveness rather than success or failure. Although systems evaluation can serve such other functions as knowledge building and theory testing, unless it gains serious hearing when program decisions are made, it fails in its major purpose (Weiss, 1972).

Field Experiments

The field experiment evaluation is based on principles of the experimental model. Guided by a predetermined plan the evaluator intentionally maniqulates one or more of the independent variables, thus exposing various groups of subjects to the different variables and then observes the changes in the dependent variables. To insure that observed differences among groups really reflect differences in the independent variables, the experimental groups are usually selected randomly (Simon, 1969).

Although the logic of experimental design is nearly infallible, evaluators have had limited success in implementing a true experimentation outside the laboratory. Instead, most studies have collected evidence based on observation of natural variations in the independent variables. This type of setting is referred to as a quasi-experimental design. The important characteristic of quasi-experiments is that some force clearly unrelated to the dependent variable causes the variation in the independent variable (Simon, 1969).

Several quasi-experimental designs are presented in Table I ranging from "one shot case studies" to experimental-control group designs with randomization and rigorous management of all foreseeable variables influencing internal and external validity (Issac and Michael, 1971). Each has applicability to a particular setting or program. The reader may wish to consult the references listed for a more thorough discussion of the internal and external validity limitations of each paradigm.

Systems Models

The objective of systems evaluation is constant program assessment and improvement. A systems model is programmatic research whose major function is to aid those responsible for making decisions to plan and adjust their activities in an attempt to increase the probability of achieving desired action or service goals. Such models have been called process models and have had their major development in the field of operations research (Suchman, 1972). Two variations of operations research will be examined--one whose major orientation is program input and one concerned with program output.

Product evaluation measures and interprets attainments during the project term as well as at the end of a project cycle. Activities include devising operational definitions of objectives, measuring criteria associated with the objectives of the activity, comparing these measurements with predetermined absolute or relative standards, and making rational interpretations of the outcomes using the recorded context, input, and process information. Experimental design can and should be employed in certain kinds of product evaluation situations. However, change in design application may be required to account for individual differences in clientele.

Others provide additional support for this systems orientation to evaluation. Weiss (1972) says that programs have other functions and have consequences besides achieving official goals and these are worthy of study. Suchman (1972) contends that experimental design with its emphasis on success--failure is neither applicable nor relevant to ongoing programs. Critics of experimental design usually offer three major objectives to its utility.

1. Experimental design fails to provide for continual program improvement.

2. Experimental design provides useful information at the terminal point of a program but is useless in planning and implementing a program.

3. Experimental control is not practicle in most instances.

Thus, operations research is the appropriate design because it presents the entire process of program development and management with the focus of evaluation being upon day-to-day operation of the system as a whole. The results of this type of evaluation research becomes applicable to decision-making at all stages of program planning, development and operation (Suchman, 1972).

Systems Output Evaluation

The function of output evaluation is to provide feedback from results to decisions. Output evaluation (1) assesses the effectiveness of an ongoing program in achieving its objectivities, (2) relies on the principles of research design to distinguish a program's effects from those of other forces working in a situation, and (3) aims at program improvement through a modification of current operations (Wholey et al., 1973).

Output evaluation is concerned with questions of program effectiveness more than program efficiency. In this respect, it is goal-oriented, focusing on output rather than input. Output evaluation differs from program analysis and policy analysis which usually compare existing and hypothetical alternative program solutions to the same problem.

This design distinguishes four major types of evaluation--program impact evaluation, program strategy evaluation, project evaluation and project rating.

Program impact evaluation is assessment of the overall effectiveness of a national program in meeting its objectives, or assessment of the relative effectiveness of two or more programs in meeting common objectives. Its goal is to assist policy makers in reaching decisions on program funding levels or on possible redirection of a program.

Systems Input Evaluation

One of the most thorough examples of evaluation of an operational system (education) is provided by the Phi Delta Kappa National Study Committee (1971). A brief summary of their efforts will be presented to illustrate evaluation based on input effectiveness. For a more thorough treatment of educational evaluation and decision-making, the reader is referred to the reference cited.

In contrast to research methodology where the emphasis is on generation of new knowledge, evaluation methodology--particularly in the field of education--is concerned with the process of delineating, obtaining and providing useful information for judging decision alternatives. This information is not necessarily new knowledge and is highly particularistic and specific to a decision situation rather than being generalizable to many or all settings.

Although the term "judging" is central to the definition of evaluation, the evaluator who participates in decision-making destroys his own objectivity and, hence, his utility. Thus, educational evaluation may be defined as the process of delineating, obtaining, and providing information useful to decision makers for judging decision alternatives.

This systems perspective identifies four types of decisions for which evaluation research can be conducted: planning, structuring, implementing, and recycling.

Planning decisions specify major changes that are needed in a program--either ends or means or both. Structuring decisions specify the means to achieve the ends established as a result of planning decisions. Implementing decisions are those involved in carrying through the action plan. Recycling decisions are concerned with attainments at any point in a program. They are used to determine the relationship of attainment to objectives and whether to continue, terminate, evolve, or drastically modify an activity.

Corresponding to these four decison types are four types of evaluation: context, input, process, and product. Although specific evaluation designs for each type vary according to the setting for change, each has a general purpose.

Context evaluation supplies the background for the determination of objectives. It provides an initial basis for defining objectives operationally, identifying program stategies, and developing proposals for outside funding. Context evaluation monitors the system to maintain a current baseline of information about it and compares actual and intended system performance. PERT is one example of a systems analysis technique.

Input evaluation provides information for determining how to utilize resources to meet program goals. This is accomplished by identifying and assessing (1) relevant capabilities of the organization, (2) strategies for achieving program goals, and (3) designs for implementing a selected strategy. One technique useful for input evaluation is cost/benefit analysis.

Process evaluation provides periodic feedback to those responsible for implementing plans and procedures. Its main objectives are to detect or predict effects in procedural design or implementation, provide information for program decisions, and maintain a record of the procedure as it occurs.

Program strategy evaluation is assessment of the relative effectiveness of different techniques used in a national program. Its goal is to inform those responsible for programs of the different strategies or methods used by projects in the national program.

Project evaluation is assessment of the effectiveness of an individual project in achieving its stated objectives. Its goal is to determine ending results.

Project rating is assessment of the relative effectiveness of difference local projects in achieving program objectives. Projects operating in similar environments may be compared.

The success or failure of a program may be evaluated in terms of five categories of cirteria: (1) efforts or input, (2) results of the effort or effectiveness, (3) program impact in relation to total amount of need, (4) cost effectiveness or a ratio between effort and impact, and (5) the programming process (Suchman, 1967).

Evaluation Design for Rural Development

The selection of an evaluation design and, hence, its appropriate and legitimate role cannot be founded on a self-contained, one time study based on before-after comparisons of a single stimulus and confined to the terminal effects of the program. Nor can it be derived from an approach designed primarily for program analysis and program improvement--although these are desirable activities.

To evaluate means to assess value. Before the assessment can take place, the desired value must be understood (Suchman, 1972). Value can be assessed in several ways including intuition, experience, available facts, and research. To assess the value of a program for rural development on any basis other than research and the principles of modern experimental design reduces the probability of distinguishing program effects, if any, from the effects of other programs and of the environment.

In considering the objections to experimenting design discussed previously, Houston (1972) makes the following points:

1. The criticism that experimental design precludes change and improvement of the program makes the dubious assumption that modifications tend to improve a program, and appears to confuse internal with external validity.

2. That experiemtnal design cannot provide information when it is needed assumes that measurement and analysis must await the terminal point of the program. Subsets of sampling units provide an acceptable measure for short-term feedback.

3. Randomization is often precluded for moral, social, or psychological reasons. Randomization does not require a "no treatment" group--it does require that the control group not receive a treatment whose outcomes are likely to resemble those of the program being evaluated. In addition, several techniques are available by which control-experimental groups can be analyzed (Campbell, 1972).

The design cannot be developed, however, until those responsible for the program identify the values to be assessed in the fashion of specific goals or objectives, precise formulation of activities capable of achieving the specified goals and the creation of standards against which the program can be compared. Alkin (1969) suggests that the evaluator can help during the initial stages by pointing out inconsistencies, potential difficulties, or additional data that might modify the decision-maker's views on the relevance of certain concerns. Nevertheless, the decision-maker, and not the evaluator, determine the nature of the domain to be examined.

Administrators have particular needs and evaluators have specific requirements. These needs and requirements can neither be in conflict nor ignored in the design of the evaluation. Perhaps the role of the Rural Development Center should be to provide leadership in the meshing of these needs and requirements so that an evaluation design can be developed that provides information to serve as a rational basis for making objective judgments on the economic and social costs and effects of a national program or local project for rural development.

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